

Summary of the Office Action

The Office Action sets forth a restriction requirement between Group I (claims 1-16), Group II (claims 17-25), and Group III (claim 26). Based on a provisional election of Group I (i.e., claims 1-16), the Office Action rejects claims 1-16 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Shirai et al. (U.S. Patent 5,543,151).

Group Election

Applicants elect, without traverse, claims 1-16 of Group I for examination.

Discussion of Rejections

The adhesive composition of the present invention comprises as one element an acrylic copolymer obtained from a monomer mixture containing three components: (A) (meth)acrylic acid alkyl ester monomer, (B) an alkoxy group-containing ethylenically unsaturated monomer, and (C) a carboxy group-containing ethylenically unsaturated monomer. When an acrylic copolymer prepared from a monomer mixture of all three components is used to prepare an adhesive composition, the resulting adhesive composition has a high moisture permeability allowing skin to remain dry and allowing the adhesive composition to remain adhered to skin that is wet with perspiration.

Shirai et al. discloses an adhesive composition comprising an acrylic polymer. The acrylic polymer can be "a polymer or a copolymer comprising a (meth)acrylic acid ester as a main component, if necessary, copolymerized with a monomer copolymerizable with the (meth)acrylic acid ester" (col. 2, lines 34-38). Shirai et al. recites, in a long list, numerous monomers that can be copolymerizable with the (meth)acrylic acid alkyl ester (corresponding to (A)) (see col. 2, line 53 - col. 3, line 15). The monomers recited in Shirai et al. in that long list include an alkoxy group-containing ethylenically unsaturated monomer (corresponding to (B)) and a carboxy group-containing ethylenically unsaturated monomer (corresponding to (C)). Thus, Shirai et al. discloses many individual components that can be mixed and matched, and indeed Shirai et al. indicates that the monomers can be used alone or as mixtures (see col. 3, lines 16-17).

While Shirai et al. discloses the individual components (A), (B), and (C), Shirai et al. does not specifically disclose an acrylic copolymer obtained from all three components (A), (B), and (C). Indeed, none of the examples disclosed by Shirai et al. provides an acrylic copolymer prepared from three different types of monomers, let alone an acrylic copolymer prepared from the particular three components (A), (B), and (C). Based on the long list of monomers that can be copolymerized with (meth)acrylic acid as disclosed by Shirai et al., one of

ordinary skill in the art would not consider Shirai et al. as disclosing the acrylic copolymer obtained from the combination of components (A), (B), and (C) as recited in the pending claims. Under the circumstances, the present invention cannot properly be considered to have been anticipated by Shirai et al.

In addition, there is nothing in Shirai et al. that would direct or motivate that same person of ordinary skill in the art to single out the specific monomers (B) and (C) to combine with component (A) in order to provide an acrylic copolymer as recited in the pending claims. The only way in which Shirai et al. can be considered as teaching or suggesting the acrylic copolymer obtained from the combination of components (A), (B), and (C) is through the use of impermissible hindsight, i.e., with the knowledge of the present application and the invention as claimed therein. The use of such hindsight, of course, cannot serve as a proper basis for an obviousness rejection.

In view of the failure of Shirai et al. to direct one of ordinary skill in the art to the particular combination necessary to arrive at the present invention, the present invention must be considered to be unobvious over Shirai et al. The unobviousness of the present invention is further evidenced by the fact that nothing in Shirai et al. suggests that an adhesive composition comprising an acrylic copolymer obtained from the combination of components (A), (B), and (C) would be a superior adhesive composition.

In that respect, Examples 2-5 of Shirai et al. illustrate the preparation of a medical bandage with an acrylic copolymer obtained by copolymerization of acrylic acid (A) and 2-ethylhexyl acrylate (C) (i.e., component (B) is absent). These comonomers are identical to those used in Comparative Example 2 of the specification of present application. Table 1 of the present application illustrates that adhesive sheets prepared from Comparative Example 2 (which corresponds to Examples 2-5 of Shirai et al.) had weaker skin adhesion in both a normal, dry state and wet state as compared to an adhesive composition of the present invention. In addition, adhesive sheets of Comparative Example 2 showed slight maceration just after peeling, indicating lower water vapor permeability and increased sweating of the skin as compared to adhesive sheets containing acrylic copolymers in accordance with the present invention (i.e., those containing all three components (A), (B), and (C)). It is only when all three components (A), (B), and (C) are used together as in the present invention that the adhesive composition maintains good adhesion to the skin even when it is wet from perspiration.

The adhesive composition and medical bandage taught by Shirai et al. were not prepared with the intent of solving the same problem of the present invention. In other words, nothing in Shirai et al. suggests the use of an acrylic copolymer obtained from a monomer mixture containing the three components (A), (B), and (C), so as to prepare an adhesive composition

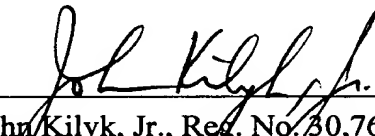
that has a high moisture permeability allowing skin to remain dry and to allow the adhesive composition to remain adhered to skin wet with perspiration. In the absence of such a teaching or suggestion, Shirai et al. cannot properly be said to render the present invention obvious.

Since the subject matter of the pending claims is both novel and unobvious, and therefore patentable, in view of Shirai et al., the anticipation and obviousness rejections based thereon should be withdrawn.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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Date: July 1, 2002

CERTIFICATE OF MAILING

I hereby certify that this RESPONSE TO OFFICE ACTION (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

Date: July 1, 2002

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